

CLAIMS:

1. A data processing device comprising
a memory having locations, each capable of storing a WOM codeword from a WOM code;
a memory selector for selecting a currently selected location of a logical series of the
locations;
5 a data encoder that encodes a received data value in a new codeword from the WOM code, as
a function of the received data value and a previous codeword stored in the currently selected
location, the data encoder causing the currently selected location to be changed to a next one
in the logical series when the WOM code is exhausted, the data encoder storing the new
codeword in the currently selected location;
10 - a reset circuit for resetting a content of the locations in the logical series, the
reset circuit being triggered when the WOM code is exhausted for all the locations of the
logical series.

2. A data processing device according to Claim 1, wherein the memory selector
15 is arranged to determine the currently selected location from a content of the locations, so
that the currently selected location has an immediate predecessor location, if any, that
contains a codeword indicating that the location is full and an immediate successor location,
if any, that contains an initial codeword value produced by resetting.

20 3. A data processing device according to Claim 1, comprising
- an input for receiving a dataword;
- an error correcting encoder, arranged to form N data values, each data value at
least representing a respective part of the dataword encoded in an error correcting code;
- the memory selector being arranged to select N currently selected locations,
25 each of a respective logic series of the locations;
- the data encoder encoding the data values in N respective new codewords
from the WOM code, each as a function of a respective one of the data values and a previous
codeword stored in the currently selected location of a respective one of the logic series, the
data encoder causing the currently selected location or locations to be changed for those of

the logic series in which the WOM code is exhausted, the encoder storing each new codeword in the currently selected location of a respective one of the series;

- the reset circuit being triggered for those of the logic series where WOM code is exhausted for all locations in of the logic series.

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4. A data processing device according to Claim 1, said series of locations being one of a plurality of logical series of locations comprised in the memory, the data processing device comprising

- an address input for receiving an address value corresponding to the data;

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- a series selector for selecting, under control of the address value, the series of locations operated upon by the memory selector, the data encoder and the reset circuit.

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